

Applicant : Allen et al.
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Attorney's Docket No.: 10887-013002

REMARKS

In reply to the Office Action of September 26, 2005, Applicant submits the following remarks. Claims 1, 4-6 and 9-10 have been amended. The amendments to claim 1 can be found in claims 2-3 as filed and on page 6, lines 1-16. Claims 2-3 and 7-8 have been cancelled. Claims 12-20 are new. No new matter has been added. Support for claim 12 can be found at in claim 1 as filed. Support for claim 13 can be found at least on page 6, line 22-page 7, line 5, page 8, lines 6-9 and page 11, the paragraph following Table 3. Support for claims 14-16 can be found in claims 1 and 8 as filed. Support for claims 17-20 can be found on page 6, line 22-page 7, line 11 and page 9, lines 8-12. Claims 1, 4-6 and 9-20 are now pending after entry of this amendment. Applicant respectfully requests reconsideration in view of the foregoing amendments and these remarks.

Rejections

All of the pending claims were rejected under 35 U.S.C. § 102(b) as being anticipated by or unpatentable under 35 U.S.C. § 103(a) over U.S. Patent No. 5,842,652 ("Warsing"). The applicant respectfully disagrees.

Claim 1 is directed to a system having an arrangement of separation and grinding devices. The arrangement includes an air separator for separating metal materials from the plastic-rich mixture, a grinder in operable communication with the air separator such that at least a portion of a plastic material exiting the separator enters the grinder, and a second separator in operable communication with the grinder, the second separator being configured to receive a ground material stream from the grinder and to separate at least one ground light material stream from the ground material.

Warsing describes a waste recycling processing mechanism that has multiple processors for crushing glass and shredding Type 1 plastics (col. 7, line 63-col. 8, line 1). A human being within the mechanism sorts recyclables, such as glass and plastic, by guiding the materials into an appropriate processing unit, that is, toward a glass shredder or a hopper (col. 8, lines 37-42). Alternatively, automatic sorting, such as an air blower or air knife, which directs recyclables into

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processors according to machine vision reading of data imprinted on each bottle, separates the recyclables (col. 6, lines 43-49, col. 9, lines 26-29). The sorting, whether manual or automatic, separates by colors of glass, types and grades of plastics, metals, paper and cardboard (col. 7, lines 1-6).

Warsing fails to suggest or disclose an arrangement including an air separator for separating metal materials from the plastic-rich mixture, a grinder in operable communication with the air separator such that at least a portion of a plastic material exiting the separator enters the grinder, and a second separator in operable communication with the grinder, the second separator being configured to receive a ground material stream from the grinder and to separate at least one ground light material stream from the ground material. While Warsing describes a grinder, an air knife and an air separator, Warsing does not suggest using the arrangement as claimed. In particular, Warsing does not suggest that two separators are desirable within a single arrangement. When a person is sorting recyclables, the person sorts the plastics by type and grade. Additional sorting is not required because the sorted recyclables are a "compact, clean and uncontaminated market-ready product" (col. 7, lines 1-9). Alternatively, an air knife in combination with a processor reading data imprinted on the materials is used to sort the recyclables. Such accurate sorting makes additional sorting redundant. Further, the sorting methods used in Warsing do not indicate that plastics that are to be sorted and shredded would then need to be separated again so that ground light material could be removed from the mixture. For at least these reasons, the applicant submits that claim 1, as well as claims 4-8 which depend from claim 1, are neither anticipated by or unpatentable over Warsing.

Claim 9 is directed to a method including feeding a plastic-rich feed mixture into an air separator to separate metal materials from the plastic-rich feed mixture, followed by grinding at least a portion of a plastic material exiting the air separator in a grinder to form a ground material, followed by sending the ground material from the grinder into a second separator to separate at least one ground light material stream from the ground material.

For similar reasons to those noted above, Warsing also fails to suggest or disclose a method including feeding a plastic-rich feed mixture into an air separator to separate metal

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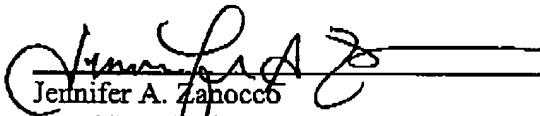
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materials from the plastic-rich feed mixture, followed by grinding at least a portion of a plastic material exiting the air separator in a grinder to form a ground material, followed by sending the ground material from the grinder into a second separator to separate at least one ground light material stream from the ground material. The applicant therefore submits that claims 9-11 are anticipated by or unpatentable over Warsing.

No fee is believed to be due. If, however, there are any charges or credits, please apply them to Deposit Account No. 06-1050.

Respectfully submitted,

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